

## **Citizens Finance Review Commission**

#### Commissioners

Tony Astorga (Co-Chair)

William J. Post (Co-Chair)

Frank Alvarez

Fritz Aspey

David Bartlett

Johnny Basha

Drew Brown

James Bush

Ray Clarke

Peter Fine

Tom Franz

Kristine Garrett

Yolanda Kizer

Ivan Makil

Anne Mariucci

Monsignor Edward Ryle

Rano Singh Sidhu

David Smith

Randie Stein

Mary Upchurch

many openan

Joel Valdez

**Executive Director** 

Leezie Kim

Possible Reforms to Arizona's Individual Income Tax

**Prepared for the Citizens Finance Review Commission** 

by

Income Tax Research Committee Anne Mariucci, Chair

and

**Authors:** 

James Barash, Manager at KPMG LLP

Patrick Derdenger, Partner of Steptoe & Johnson LLP

Barbara Dickerson, Director at Deloitte & Touche LLP

David Downs, Principal Tax Analyst of Salt River Project

Amy Etzkorn, Assistant Vice President Tax of AdvancePCS

**Karen Jacobs, Senior Economist of the Department of Revenue** 

Georganna Meyer, Chief Economist of the Department of Revenue

Dana Naimark, Assistant Director of the Children's Action Alliance

Susan Kimsey Smith, Esq. of Olsen-Smith, Ltd.

This paper is the result of the collaborative efforts of many people. This paper is not, however, representative of the views of all or even a consensus of the committee members and the critical reviewers. To attribute any author with the various positions taken in this paper would be misleading. Rather, the authors attempted to disclose as fully and succinctly as possible the various different opinions and literature on any given topic to aid the CFRC in its deliberations.

### **Critical Reviewers:**

Dan Anderson Assistant Executive Director for Institutional Analysis Arizona Board of Regents Catherine F. Connolly Executive Director League of Arizona Cities and Towns Dennis Hoffman, Ph.D. Associate Dean, Graduate Programs W. P. Carey MBA Arizona State University

Elliott D. Pollack
President
Elliott D. Pollack & Co.

Elliot D. Pollack & Co.

Elliot D. Pollack & Co.

© 2003 by the Citizens Finance Review Commission. This document may be reproduced without restriction provided it is reproduced accurately, is not used in a misleading context, and the author(s), the Citizens Finance Review Commission and the Arizona Department of Commerce are given appropriate recognition.

This report was prepared for the Citizens Finance Review Commission with funding and/or assistance from the Arizona Department of Commerce and the Commerce and Economic Development Commission, and may be presented independently elsewhere at the authors' discretion. This report will be available on the Internet for an indefinite length of time at <a href="https://www.azcfrc.az.gov">www.azcfrc.az.gov</a>. Inquiries about this report or the Citizens Finance Review Commission should be directed to the Office of the Governor of Arizona, (602) 542-7601.

The authors and sponsors have made every reasonable effort to assure the accuracy of the information contained herein, including peer and/or technical review. However, the contents and sources upon which it is based are subject to changes, omissions and errors and the authors and sponsors accept no responsibility or liability for inaccuracies that may be present. THIS DOCUMENT IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE AUTHORS AND SPONSORS PRESENT THE MATERIAL IN THIS REPORT WITHOUT MAKING ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR ASSUMING ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS OF ANY INFORMATION, APPARATUS, PRODUCT, OR PROCESS DISCLOSED, OR REPRESENTING THAT ITS USE WOULD NOT INFRINGE PRIVATELY OWNED RIGHTS. THE USER ASSUMES THE ENTIRE RISK AS TO THE ACCURACY AND THE USE OF THIS DOCUMENT AND ANY RELATED OR LINKED DOCUMENT.

### 1. What it is:

The state personal income tax is piggy-backed onto the federal income tax. Taxpayers have a small portion of their paycheck withheld to pay their taxes and file returns once a year to assess their liability and credits. (Title 43 of the Arizona Revised Statutes). The state income tax is administered and audited by the Arizona Department of Revenue.

Arizona currently has 5 brackets for state income tax purposes, with marginal rates ranging from 2.87% to 5.04%. The top rate applies to households with taxable incomes of over \$150,000 for single filers (or \$300,000 joint filers). Arizona state income tax calculations begin with a taxpayer's federally adjusted gross income (FAGI). Then additional adjustments (such as deductions or credits) are made from there.

This paper deals solely with individual income tax, not the corporate income tax. However, some businesses pay personal income taxes, including sole proprietorships and partnerships

Eight proposals were analyzed regarding the individual income tax for consideration by the Citizen Finance Review Commission. Calculations and estimates were performed by the Department of Revenue using a modeling system that includes 35,000 actual 1999 income tax returns with adjustments made to reflect 2003 dollars.

- A. Indexing the brackets, deductions and exemptions for inflation
- B. Adding a 6% bracket for households with income above \$250,000 for single filers (\$5000,000 married filing jointly)
- C. Increasing the top 2 rates by 10% (to 5.2% and 5.5%)
- D. Increasing all the rates by 2% or 10%
- E. Increasing the standard deduction to \$5,000 for single filers (\$10,000 married filing jointly)
- F. Increasing all the rates and increasing the standard deduction to \$5,000 for single filers (or \$10,000 for joint filers)
- G. Lowering the taxable income for the highest tax bracket to \$75,000 for a single filer and \$150,000 for a household married and filing jointly
- H. Adjust Family Credit Thresholds for inflation

### 2. How it would be administered

All revisions would be applied by the Department of Revenue through the tax code, just as the state income tax currently operates. Forms will need to be revised to reflect any changes, but forms are reviewed and revised annually already.

### 3. Impact on existing revenue systems

Because income tax funds are deposited directly to the state and the tax is administered and collected by the state, we expect that localities' own revenues will not be affected by changes in the income tax system. However, state law directs a certain percentage of state income tax revenues be distributed to cities and towns. Therefore, if income tax changes increase or decrease state revenue collections, the amount of funds shared with cities and towns would increase or decrease accordingly (unless the state urban revenue sharing law were changed – ARS 43-206).

We do not expect the tax changes discussed here to have a secondary effect on other, current revenue sources.

### 4. Cost

The cost of administering any changes would be modest because the mechanisms for collecting, processing and auditing income tax returns and reviewing and revising tax forms are already in place.

### 5. Policy Considerations

### A. Equity

Six of the eight proposed changes analyzed here would increase the progressivity of Arizona's individual income tax, thus ranking high in vertical equity. Increasing individual income tax revenues as a share of total state revenues would increase the progressivity of the overall tax system.

### B. Economic Vitality

The economic literature is somewhat mixed on the impact of progressive personal income taxes on economic growth. A 1997 review of the literature finds that "tax progressivity has a very tenuous relationship with a state's economic performance." Some specific analyses found no relationship between tax progressivity and economic performance or income growth. Other analyses found a relationship under very specific circumstances (strong regional economic growth and regional competitors having very different levels of progressivity). (Howard Chernick, Hunter College and Graduate Center, City University of New York, *Tax Progressivity and State Economic Performance*, Economic Development Quarterly, August 1997, vol. 11, No. 3)

A 1991 paper delivered at a National Tax Association meeting reported that "state personal income taxes most likely do have an effect on regional competition" but primarily in states with significant manufacturing industries. (Sally Wallace, *The Effect of State Personal Income Tax Differentials on Interstate Competition*, State Tax Notes, December 23, 1991).

Wallace notes that one limitation of her work is the lack of measurement on the trade-offs between taxes and expenditures.

Research from the Upjohn Institute finds that the positive effects of increased public expenditures on job growth offsets any negative effects of higher taxes. (T. J. Bartik, *Who Benefits from State and Local Economic Development Policies? Kalmazoo* MI, 1991, cited in Chernick, op.cit.). This point is reaffirmed throughout the literature.

Supporters of low personal income taxes (especially on higher income individuals) argue that high income taxes will deter higher income individuals from moving into a state, but data do not appear to bear out this conclusion. For example, analysis from the Institute on Taxation and Economic Policy demonstrates that states with high income tax burdens have experienced *more* rapid economic growth than states with low income tax burdens during the past two decades. (*High Income Tax States Have Strong Economies*, December 1999, ITEP, www.itepnet.org/tncatopr.htm)

The personal income tax does not apply to corporations, although it does apply to partnerships and sole proprietorships.

### C. Volatility

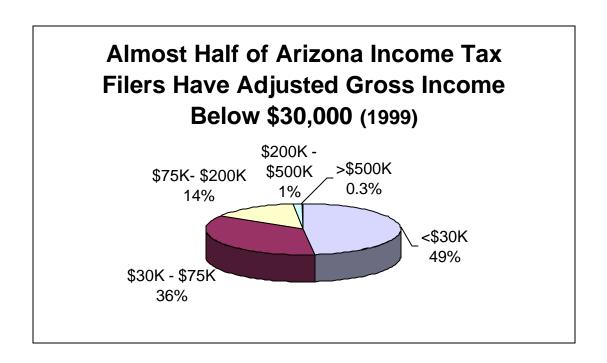
According to analysis from the Arizona Joint Legislative Budget Committee (JLBC), Arizona's progressive income tax structure basically tracks economic growth (as measured by personal income). Income tax revenue growth tends to be a bit higher than economic growth during "good" times and lower than economic growth during recessionary times. The personal income tax is more elastic than the sales tax, but far less volatile than the corporate income tax. The proposed changes are unlikely to change the overall volatility of the tax collections

### D. Simplicity

Most of the proposed changes to the income tax system do not change the simplicity of the current system. From the taxpayer perspective, adding additional brackets (Option B) will increase the complexity.

### 6. Economic Impact

Different amounts of revenue will be raised by the different proposals. The impacts on households at different income levels also vary by proposal. In Arizona, almost half of all households have FAGIs of under \$30,000, so it is important to look at the different impacts by household income.



## A. Indexing the brackets, deductions and exemptions for inflation (See Appendix A for new schedule)

Currently, Arizona does not adjust brackets, deductions or exemptions to keep up with inflation. This means as the cost of living and wages rise, tax payers are bumped into higher tax brackets with higher marginal tax rates, even if in inflation adjusted terms their income remains steady. (As of 1999, 17 states had indexing in some form. *Inflation Indexing in Arizona*, Economic Research and Analysis, Arizona Department of Revenue, July 2003.)

Adjusting the exemptions and deductions for inflation while indexing the brackets would result in a loss of \$8.5 million to the general fund in the first year. All filers would see a decrease in taxes owed, with average savings of \$4 per taxpayer. Families earning \$10,000 - \$20,000 (FAGI) would save 5% or \$1; families earning \$500,000 - \$1 million would save 0.1% or \$30. Adjusting the brackets annually for inflation would result in additional revenue losses each year.

# B. Adding a 6% bracket for taxpayers with taxable income above \$250,000 for single filers (\$500,000 married filing jointly)

This would result in an additional \$43.7 million to the state coffers each year. Only households with federally adjusted gross incomes over \$250,000 will be affected. About three quarters of the increase would be borne by those with FAGIs of over \$1 million. Millionaires on average would experience a 16% increase in state income taxes owed, owing an average additional \$19,000 in state personal income taxes each year.

C. Increasing top two rates by 10% (See Appendix A for specific rate schedule) This would result in an additional \$64.7 million to state coffers each year. Only taxpayers with taxable income of over \$100,000 would be affected. At AGI of \$300,000 (married filing jointly, 2 children) a family would owe an additional \$660; at \$500,000, an additional \$1.396.

### **D** 1– Increasing all rates by 2% (See Appendix A for specific rate schedule)

This would result in an additional \$42.6 million to state coffers each year. Most families would see a 2% or less change in their tax bill. Taxpayers with taxable income less than \$100,000 would pay on average less than \$35 per year in additional taxes. Taxpayers with taxable income over \$1 million would pay an average of \$2,371 in additional taxes. The average increase across all taxpayers would be \$20.

The following provides an example of the tax calculation for five families (married filing jointly, 2 children) with varying FAGIs and the estimated impact of the tax proposal:

Federal Adjusted Gross Income	Additional Taxes Owed
\$ 20,000	\$ 0
\$ 50,000	\$ 19
\$125,000	\$ 55
\$300,000	\$191
\$500,000	\$337

### **D 2 – Increasing all rates by 10%** (See Appendix A for specific rate schedule)

This would result in an additional \$218 million to state coffers each year. Taxpayers with FAGI less than \$75,000 would pay less than \$120 per year in additional taxes. Taxpayers with FAGI over \$1 million would pay an average of \$11,860 in additional taxes. The average increase across all households would be \$104.

The following provides an example of the tax calculation for five families (married filing jointly, 2 children) with varying FAGIs and the estimated impact of the tax proposal:

Federal Adjusted Gross Income	Additional Taxes Owed
\$ 20,000	\$ 0
\$ 50,000	\$ 93
\$125,000	\$ 288
\$300,000	\$ 999
\$500,000	\$1,735

### **E- Increasing the Standard Deduction to \$5,000** (or \$10,000 married filing jointly)

This would result in a *loss* of \$33.2 million to state coffers each year. Taxpayers who would see the greatest reduction, as a percentage of total state income taxes owed, are those with FAGIs of \$25,000 or less. They would save on average 11% - 60% (or \$2 to \$26). Taxpayers with FAGIs of \$100,000 or more would save 0.1% or less (up to \$7). The average savings would be \$16. This would not affect taxpayers who itemize deductions.

The following provides an example of the tax calculation for five families (married filing jointly, 2 children) with varying FAGIs and the estimated impact of the tax proposal:

Adjusted Gross Income	Lower Taxes Owed
\$ 20,000	\$ 0
\$ 50,000	\$ 61
\$125,000	\$ 0
\$300,000	\$ 0
\$500,000	\$ 0

### F. Increasing the Standard Deduction and Increasing Tax Rates by 10%

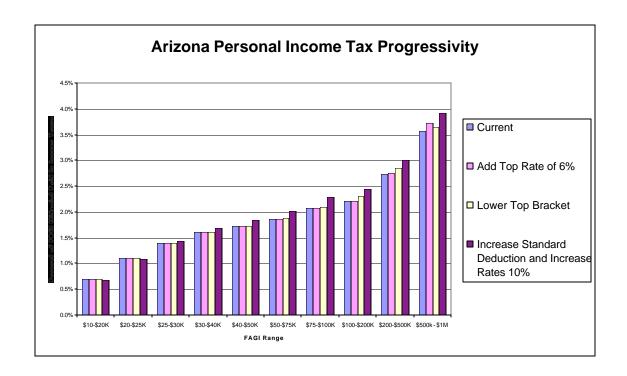
This would result in an additional \$181.4 million to state coffers. It would be a tax cut for taxpayers with FAGIs of \$25,000 or less and a small increase, on average, for most other households. For taxpayers with FAGIs between \$25,000 and \$75,000 the tax increase would be less than \$100 per year. For filers with adjusted gross incomes over \$1 million, the increase would average \$11,857. The average increase across all households would be \$87.

Under this scenario, 41% of taxpayers would, on average, have their personal income taxes reduced; 20% would have an average tax increase of slightly about \$25 per year; 24% would have an average tax increase of \$110 or less per year; the remaining 17% of tax payers would have an average annual tax increase of \$180 or more.

The following provides an example of the tax calculation for five families (married filing jointly, 2 children) with varying FAGIs and the estimated impact of the tax proposal:

Additional Taxes Owed
\$ 0
\$ 26
\$ 288
\$ 999
\$1,735

This option is the most progressive of all the proposals. The graph below compares the distribution of the tax burden of this option to the distribution of the current system and several other options.



G. Lowering the top bracket ranges (See Appendix A for specific rate schedule) Currently, taxpayers do not begin owing Arizona's top rate until their taxable income reaches \$150,000 for a single filer (\$300,000 married filing jointly). Starting the top bracket at \$75,000 is more in keeping with competitor states and would raise an additional \$36.8 million. Only taxpayers with FAGIs above \$100,000 would see more than an average 1% change in their state income tax bill. On average, a taxpayer would owe an additional \$18 per year.

The following provides an example of the tax calculation for five families (married filing jointly, 2 children) with varying FAGIs and the estimated impact of the tax proposal:

Federally Adjusted Gross Income	Additional Taxes Owed
\$ 20,000	\$ 0
\$ 50,000	\$ 0
\$125,000	\$ 61
\$300,000	\$ 485
\$500,000	\$ 676

### H. Adjusting the Family Tax Credit for Inflation

The current Family Tax Credit limits the state income tax burden borne for the lowest income households (up to \$31,000 for a married filing jointly couple with children). Once taxes owed are calculated, a credit of \$40 per person (up to \$240) is applied to the household's tax bill. Without the credit, a family with 2 children (married filing jointly) and federally adjusted gross income of \$20,000 would owe \$29 in taxes. The family tax credit is applied so this family owes \$0 instead. (The credit is non-refundable.) A family of four does not begin to owe state income taxes in Arizona until their income reaches \$23,600 (*State* 

*Income Tax Burdens on Low-Income Families in 2002*, Johnson, Zahradnik and Llobrera, Center on Budget and Policy Priorities, April 2003, <a href="www.cbpp.org/4-11-03sfp.htm">www.cbpp.org/4-11-03sfp.htm</a>)

While effective, the value of the Family Tax Credit is being eroded by inflation. The credit has not been adjusted for inflation since its creation in tax year 1996 (ARS 43-1073). Adjusting it would cost the state coffers \$1.7 million. The family tax credit was adjusted in tax year 1998 when the tax credit amount was increased and the number of families members allowed to qualify for the credit was increased from four to six (thereby raising the income threshold where taxpayers have no tax liability)

Only families with FAGI below \$40,000 would be affected, with most of the reduction focused on the 168,500 households with FAGI between \$20,000 and \$25,000. Their average tax burden would decline \$7.

Each option is progressive. With the exception of increasing all rates by 2% or 10%, each option is more progressive than Arizona's current PIT system. (See Appendix B.)

State Income Taxes Owed Currently and Under Various Options for Marries Joint Filers with 2 children at Various Income Levels

FAGI	Current	Add Top Rate of 6%	Increase Top Rates by 10%	Increase All Rates 2%	Increase All Rates 10%	Increase Standard Deduction	Increase Standard Deduction and Increase All Rates 10%	Lower Top Bracket
\$20,000	0	0	0	0	0	0	0	0
\$50,000	926	926	926	945	1,019	865	952	926
\$125,000	2,892	2,892	2,892	2,947	3,180	2,892	3,180	2,953
\$300,000	10,031	10,031	10,691	10,222	11,030	10,031	11,030	10,516
\$500,000	17,440	17,440	18,836	17,777	19,175	17,440	19,175	18,116

Actual taxes owed for a sample family, married filing jointly with 2 children. Families at the \$20,000 and \$50,000 FAGI level are assumed to use the standard deduction. Families at FAGI of \$125,000 or higher are assumed to itemize with itemized deduction values of \$27,800 for a family at \$125,000; \$48,700 for a family \$300,000; and \$97,900 for a family at \$97,900.

### 7. Other

**Progressivity:** Looking at state and local income, sales and property taxes combined, Arizona has a particularly high state and local tax burden on low income families, as detailed by recent analysis from the Institute for Taxation and Economic Policy (<a href="http://www.itepnet.org/wp2000/az%20pr.pdf">http://www.itepnet.org/wp2000/az%20pr.pdf</a>). Of these three main components, the income tax is the most progressive and the only component where state policy changes can significantly improve the progressivity. In other words, increasing the progressivity of the state income tax is the most efficient and effective way to balance out the overall regressivity of the tax system.

Data for the overall Arizona tax system (state and local, income, sales and property) show that households in Arizona with income less than \$15,000 pay more than two and a half times as much of their income to taxes (12.5%) as households with income over \$869,000 (4.9%). Additionally, the overall regressivity of our tax system got worse between 1989 and 2002, with overall tax burden (including sales and property taxes) increasing 2.1% for the poorest families while declining 0.5% for the richest households. Increasing the progressivity of the individual income tax and/or increasing the share of income tax revenues in the total revenue mix will help reduce the regressivity of Arizona's overall tax system.

**Federal Deductibility**: Unlike sales taxes, state income taxes are deductible on federal tax returns. Therefore, a portion of the cost of any tax increases will be borne by the federal treasury rather than Arizonans directly. For example, the federal deduction offset saves families with earnings of \$86,000 or more 11% - 25% of their state and local tax bill. (*Who Pays?*, Institute for Taxation and Economic Policy, January 2003, (http://www.itepnet.org/wp2000/az%20pr.pdf).

Comparability to "competitor" states: Arizona is fairly consistent with competitor states in terms of having a personal income tax with multiple brackets and the level of the standard deduction. Specifically, six of nine competitor states have a personal income tax. Of those, four have six or more brackets. A family of four in Arizona begins paying income taxes once earnings reach \$23,600. (Center on Budget and Policy Priorities, The Rising Regressivity of State Taxes, January 2002, http://www.cbpp.org/1-15-02sfp-pr.htm) This is fairly consistent (although slightly on the high end) with competitor states where families begin owing state income taxes at levels of \$15,300 (in Georgia) to \$39,400 (California). Arizona's standard deduction for a single filer of \$4050 is in the middle of competitor states. Oregon, Georgia, and California have lower standard deductions and Utah and New Mexico have higher deductions. (See Appendix C.)

Arizona is less consistent with competitor states regarding the income levels where the tax brackets begin and regarding the taxing of the most affluent households. For a single filer, Arizona's top rate does not kick in until taxable income reaches \$150,000. The next closest state is New Mexico which applies its highest rate to single filer households with taxable income of \$65,000. Our top rate is also lower than all the competitor states (except for Colorado which has a flat rate of 4.63%). (See Appendix C for comparisons with competitor states.)

Also detailed in Appendix C, none of our competitor states have such a large gap between the total taxes paid (as a percent of income) by the most affluent 1% of families compared to the least affluent 20%. In Arizona, the poorest families pay 2.6 times as much of their income to total taxes as the wealthiest families. Also, in none of the competitor states do low-

<sup>&</sup>lt;sup>1</sup> Progressive changes for Arizona's personal income tax include the elimination of the federal tax deduction, the addition of a working fa mily tax credit and the restructuring of the rates to make them far more graduated than they were in 1989. However, for middle and low income tax payers, these progressive income tax changes were offset by large, regressive increases in the sales and excises taxes. (ITEP, *Who Pays*, 2003)

income families pay such a large portion (12.5%) of their income to state and local taxes. Increasing the progressivity of Arizona's income tax system would help offset the regressivity of our overall tax structure.

Overall, we believe that adopting any of these options would help strengthen the personal income tax in Arizona. Increasing the share of state revenues generated by income taxes represents an opportunity to more progressively distribute the tax burden. It is also consistent with the tax code of other states.

### Appendix A

## **Proposed Individual Income Tax Rates**

Current:			
Single	9	Married	
\$0 - \$10,000	2.87%	\$0 - \$20,000	2.87%
\$10,000 - \$25,000	3.20%	\$20,000 - \$50,000	3.20%
\$25,000 - \$50,000	3.74%	\$50,000 - \$100,000	3.74%
\$50,000 - 150,000	4.72%	\$100,000 - \$300,000	4.72%
\$150,000 and over	5.04%	\$300,000 and over	5.04%

Index Brackets, Deductions, and Exemptions:				
Singl	e	Married		
\$0 - \$10,120	2.87%	\$0 - \$20,240	2.87%	
\$10,120 - \$25,300	3.20%	\$20,240 - \$50,600	3.20%	
\$25,300 - \$50,600	3.74%	\$50,600 - \$101,200	3.74%	
\$50,600 - 151,800	4.72%	\$101,200 - \$303,600	4.72%	
\$151,800 and over	5.04%	\$303,600 and over	5.04%	

Add Top Bracket of 6%	o:			
Single		Married		
\$0 - \$10,000	2.87%	\$0 - \$20,000	2.87%	
\$10,000 - \$25,000	3.20%	\$20,000 - \$50,000	3.20%	
\$25,000 - \$50,000	3.74%	\$50,000 - \$100,000	3.74%	
\$50,000 - 150,000	4.72%	\$100,000 - \$300,000	4.72%	
\$150,000 - \$250,000	5.04%	\$300,000 - \$500,000	5.04%	
\$250,000 and over	6.00%	\$500,000 and over	6.00%	

Increase Top 2 Rates by 10%					
Single	e	Married			
\$0 - \$10,000	2.87%	\$0 - \$20,000	2.87%		
\$10,000 - \$25,000	3.20%	\$20,000 - \$50,000	3.20%		
\$25,000 - \$50,000	3.74%	\$50,000 - \$100,000	3.74%		
\$50,000 - 150,000	5.19%	\$100,000 - \$300,000	5.19%		
\$150,000 and over	5.54%	\$300,000 and over	5.54%		

Increase All Rates 2%:				
Single	,	Married		
\$0 - \$10,000	2.93%	\$0 - \$20,000	2.93%	
\$10,000 - \$25,000	3.26%	\$20,000 - \$50,000	3.26%	
\$25,000 - \$50,000	3.81%	\$50,000 - \$100,000	3.81%	
\$50,000 - 150,000	4.81%	\$100,000 - \$300,000	4.81%	
\$150,000 and over	5.14%	\$300,000 and over	5.14%	

<b>Increase All Rates 10%</b>	Ď:			
Single		Married		
\$0 - \$10,000	3.16%	\$0 - \$20,000	3.16%	
\$10,000 - \$25,000	3.52%	\$20,000 - \$50,000	3.52%	
\$25,000 - \$50,000	4.11%	\$50,000 - \$100,000	4.11%	
\$50,000 - 150,000	5.19%	\$100,000 - \$300,000	5.19%	
\$150,000 and over	5.54%	\$300,000 and over	5.54%	

Increase Standard Deduction:						
Single		Married				
\$0 - \$10,000	2.87%	\$0 - \$20,000	2.87%			
\$10,000 - \$25,000	3.20%	\$20,000 - \$50,000	3.20%			
\$25,000 - \$50,000	3.74%	\$50,000 - \$100,000	3.74%			
\$50,000 - 150,000	4.72%	\$100,000 - \$300,000	4.72%			
\$150,000 and over	5.04%	\$300,000 and over	5.04%			

Increase Standard Deduction and Increase Rates 10%:						
Single		Married				
\$0 - \$10,000	3.16%	\$0 - \$20,000	3.16%			
\$10,000 - \$25,000	3.52%	\$20,000 - \$50,000	3.52%			
\$25,000 - \$50,000	4.11%	\$50,000 - \$100,000	4.11%			
\$50,000 - 150,000	5.19%	\$100,000 - \$300,000	5.19%			
\$150,000 and over	5.54%	\$300,000 and over	5.54%			

Lower Income Level for Top Brackets:						
Single		Married				
\$0 - \$10,000	2.87%	\$0 - \$20,000	2.87%			
\$10,000 - \$25,000	3.20%	\$20,000 - \$50,000	3.20%			
\$25,000 - \$40,000	3.74%	\$50,000 - \$80,000	3.74%			
\$40,000 - 75,000	4.72%	\$80,000 - \$150,000	4.72%			
\$75,000 and over	5.04%	\$150,000 and over	5.04%			

### Appendix B

### **Progressivity Ratios of Various Income Tax Proposals**

This table shows ratios that compare the percent of income paid in taxes by household at different income levels. The higher the ratio, the more progressive the tax proposal. For example, under the current Arizona income tax, an upper income household pays 5.1 times as much of their income in state income taxes as a lower income household. Under Option A, the upper income household would pay 5.14 times as much, so Option A is more progressive than the current system.

	Current	A - Indexing Brackets	B - Add 6% Top Rate	C - Increase Top 2 Rates by 10%	D - Increase Rates 2%
Ratio of Income Tax	5.10	5.14	5.33	5.54	5.10
Burden on High	5.10	3.11	3.33	5.51	2.10
<b>Income Household</b>					
Compared to <b>Low</b>					
Income Household					
Ratio of Income Tax	2.06	2.07	2.16	2.24	2.06
Burden on <u>High</u>	2,00	_,,			_,,,
Income Household					
Compared to Middle					
<b>Income Household</b>					
Ratio of Income Tax	2.47	2.48	2.47	2.47	2.46
Burden on Middle	_, ,		_,,,	_,,,	_,,,
Income Household					
Compared to Low					
<b>Income Household</b>					

	D - Increase Rates 10%	E - Lower Top Tax Bracket	F – Increase Standard Deduction and Increase Rates 10%	G - Increase Standard Deduction
Ratio of Income Tax Burden on High Income Household Compared to Low Income Household	5.07	5.21	5.82	5.81
Ratio of Income Tax Burden on High Income Household Compared to Middle Income Household	2.06	2.11	2.13	2.13
Ratio of Income Tax Burden on Middle Income Household Compared to Low Income Household	2.46	2.47	2.74	2.73

High is FAGI of \$500,000 - \$1,000,000; Middle is FAGI of \$40,000 - \$50,000 Low is FAGI of \$10,000 - \$20,000 \* The ratios compare the percent of FAGI owed in income taxes (average tax owed divided by midpoint of FAGI range) at different income levels. The percents of FAGI owed are then divided into one another to get ratios.

Exhibit C

State	Lowest	Second	Middle	Fourth	Top 20%		
	20%	20%	20%	20%	Next 15%	Next 4%	Top 1%
Arizona							
		\$15,000-	\$25,000		\$65,000-	\$127,000-	
Income Range	< \$15,000	\$25,000	\$39,000	\$39,000-\$65,000	\$127,000	\$237,000	\$237,000 or more
Avg. Income in Grp.	\$9,500	\$20,200	\$31,100	\$50,900	\$86,600	\$168,000	\$869,000
Percentage of Income to Pay State Income Taxes	0.1%	1.3%	1.7%	1.9%	2.2%	2.8%	3.9%
Percent of Income to Pay ALL State and Local Taxes	12.5%	10.7%	9.5%	8.5%	7.1%	5.8%	4.9%
California							
		\$18,000-	\$30,000-		\$80,000-	\$168,000	)-
Income Range	< \$18,000	\$30,000	\$47,000	\$47,000-\$80,000	\$168,000	\$567,00	0 \$567,000 or more
Avg. Income in Grp.	\$11,100	\$23,700	\$38,300	\$61,900	\$111,200	\$241,70	0 \$1,630,000
Percentage of Income to Pay State Income Taxes	0.2%	0.8%	1.7%	2.7%	4.0%	5.6%	8.4%
Percent of Income to Pay ALL State and Local Taxes	11.3%	10.1%	9.2%	8.7%	8.1%	7.6%	7.2%
Colorado							
		\$17,000-	\$30,000-		\$78,000-	\$154,000-	
Income Range	<\$17,000	\$30,000	\$47,000	\$78,000	\$154,000	\$692,000	\$692,000 or more
Avg. Income in Grp.	\$9,800	\$22,700	\$37,400	\$61,300	\$106,000	\$227,000	\$1,185,000
Percentage of Income to Pay State Income Taxes	1.0%	2.1%	2.8%	3.1%	3.4%	3.5%	4.1%
Total After Offset	9.9%	9.6%	8.7%	7.8%	6.8%	5.3%	4.4%
Georgia							
		\$15,000-	\$26,000-		\$69,000-	\$142,000-	
Income Range	< \$15,000	\$26,000	\$41,000	\$69,000	\$142,000		\$281,000 or more
Avg. Income in Grp.	\$9,100	\$19,600	\$32,500	\$53,200	\$93,000	\$192,000	\$995,000
Percentage of Income to Pay State Income Taxes	0.6%	2.1%	3.0%	3.5%	3.9%	4.3%	4.9%
Percent of Income to Pay ALL State and Local Taxes	11.9%	11.3%	10.3%	9.5%	8.2%	6.9%	5.4%

New Mexico							
Income Range	< \$13,000	\$13,000- \$23,000	\$23,000- \$36,000	\$36,000- \$60,000	\$60,000- \$112,000	\$112,000- \$243,000	\$243,000 or more
•	. ,					. ,	
Avg. Income in Grp.	\$7,800	\$18,300	\$28,700	\$46,000	\$79,100	\$149,000	\$611,000
Percentage of Income to Pay State Income Taxes	-0.3%	0.7%	1.5%	2.4%	3.5%	4.5%	6.1%
Percent of Income to Pay ALL State and Local Taxes	12.1%	11.1%	10.4%	9.5%	8.5%	7.3%	6.3%
Oregon							
		\$16,000-	\$27,000-	\$44,000-	\$71,000-	\$132,000-	
Income Range	<\$16,000	\$27,000	\$44,000	\$71,000	\$132,000	\$308,000	\$308,000 or more
Avg. Income in Grp.	\$9,300	\$21,100	\$34,200	\$56,100	\$90,900	\$182,000	\$672,000
Percentage of Income to Pay State Income Taxes	2.3%	3.8%	4.7%	5.1%	6.0%	6.6%	7.5%
Percent of Income to Pay ALL State and Local Taxes	9.4%	8.9%	8.1%	7.9%	7.3%	6.7%	6.1%
Utah							
		\$16,000-	\$27,000-	\$43,000-	\$67,000-	\$122,000-	
Income Range	<\$16,000	\$27,000	\$43,000	\$67,000	\$122,000	\$280,000	\$280,000 or more
Avg. Income in Grp.	\$9,600	\$20,700	\$34,600	\$54,400	\$86,300	\$168,000	\$826,000
Percentage of Income to Pay State Income Taxes	0.1%	2.4%	3.1%	3.6%	4.1%	4.4%	5.2%
Percent of Income to Pay ALL State and Local Taxes	11.4%	12.0%	10.7%	9.9%	8.6%	7.1%	5.5%

### All figures are for 2002

This chart shows for each income level (quintile), the percentage of income that goes to pay state income taxes and total state and local taxes (income, property and sales combined, after the federal off-set).

Data is for non-elderly households.

Quintiles are based on the number of households in each state. For this chart the definition of income is **total** income to the household. Quintiles vary by state.

Source: Institute for Taxation and Economic Policy, *Who Pays*, January

2003